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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/534,031

06/12/2006

Vitali Pavlovich Zubov

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EXAMINER

THERKORN, ERNEST G

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

10/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/534,031	Applicant(s) ZUBOV ET AL.	
	Examiner Ernest G. Therkorn	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-23 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 12-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 5-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, and 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosaka (U.S. Patent No. 4,045,353) in view of Kirkland (U.S. Patent No. 4,160,728). At best, the claims differ from Kosaka (U.S. Patent No. 4,045,353) in reciting a bimodal distribution of pore sizes. Kirkland (U.S. Patent No. 4,160,728) (column 2, lines 17-20) discloses that use of bimodal pore sizes results in chromatographs with a wider range of linearity. It would have been obvious to use a bimodal distribution in Kosaka (U.S. Patent No. 4,045,353) because Kirkland (U.S. Patent No. 4,160,728) (column 2, lines 17-20) discloses that use of bimodal pore sizes results in chromatographs with a wider range of linearity.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kosaka (U.S. Patent No. 4,045,353) in view of Kirkland (U.S. Patent No. 4,160,728) as applied to claims 1, 2, and 5-11 above, and further in view of Mazid (U.S. Patent No. 5,240,601). At best, the claim differs from Kosaka (U.S. Patent No. 4,045,353) in view of Kirkland (U.S. Patent No. 4,160,728) in reciting specific functional groups. Mazid (U.S. Patent No. 5,240,601) (column 3, lines 49-59, column 5, lines 52-58, column 6, lines 45-50, and column 7, lines 34-44) discloses that it is desirable to functionalize fluorinated polymers with carboxyl and amino groups to allow for specific substances to be removed. It would have been obvious to use the recited specific functional groups in

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Kosaka (U.S. Patent No. 4,045,353) in view of Kirkland (U.S. Patent No. 4,160,728) because Mazid (U.S. Patent No. 5,240,601) (column 3, lines 49-59, column 5, lines 52-58, column 6, lines 45-50, and column 7, lines 34-44) discloses that it is desirable to functionalize fluorinated polymers with carboxyl and amino groups to allow for specific substances to be removed.

Claims 1, 2, and 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Kapoustine (E.P. 1,020,220) or Kapustin (WO 00/41807) in view of Mazid (U.S. Patent No. 5,240,601) and Kirkland (U.S. Patent No. 4,160,728). At best, the claims differ from either Kapoustine (E.P. 1,020,220) or Kapustin (WO 00/41807) in reciting use of functional groups and a bimodal distribution of pore sizes. Mazid (U.S. Patent No. 5,240,601) (column 3, lines 49-59, column 5, lines 52-58, column 6, lines 45-50, and column 7, lines 34-44) discloses that it is desirable to functionalize fluorinated polymers with carboxyl and amino groups to allow for specific substances to be removed. Kirkland (U.S. Patent No. 4,160,728) (column 2, lines 17-20) discloses that use of bimodal pore sizes results in chromatographs with a wider range of linearity. It would have been obvious to use the recited specific functional groups in either Kapoustine (E.P. 1,020,220) or Kapustin (WO 00/41807) because Mazid (U.S. Patent No. 5,240,601) (column 3, lines 49-59, column 5, lines 52-58, column 6, lines 45-50, and column 7, lines 34-44) discloses that it is desirable to functionalize fluorinated polymers with carboxyl and amino groups to allow for specific substances to be removed. It would have been obvious to use a bimodal distribution in either Kapoustine (E.P. 1,020,220) or Kapustin (WO 00/41807) because Kirkland (U.S. Patent No.

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4,160,728) (column 2, lines 17-20) discloses that use of bimodal pore sizes results in chromatographs with a wider range of linearity.

The remarks urge that there is no motivation to use a bidisperse pore distribution in Kosaka (U.S. Patent No. 4,045,353), Kapoustine (E.P. 1,020,220), or Kapustin (WO 00/41807). However, Kirkland (U.S. Patent No. 4,160,728) (column 2, lines 17-20) discloses that use of bimodal pore sizes results in chromatographs with a wider range of linearity. It would have been obvious to use a bimodal distribution in Kosaka (U.S. Patent No. 4,045,353), Kapoustine (E.P. 1,020,220), or Kapustin (WO 00/41807) because Kirkland (U.S. Patent No. 4,160,728) (column 2, lines 17-20) discloses that use of bimodal pore sizes results in chromatographs with a wider range of linearity.

The remarks urge that applicants' definition of bidisperse precludes Kirkland (U.S. Patent No. 4,160,728)'s bimodal pore sizes. However, applicants' specification would appear to be devoid of that definition.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ernest G. Therkorn/
Ernest G. Therkorn
Primary Examiner
Art Unit 1797

EGT
October 2, 2009